## **ABSTRACT**

A signal measuring device controls the width of a signal for controlling frequency sweep, in accordance with a signal to be measured. The signal measuring device includes a local oscillator (10) for generating a local signal, a mixer (12) for mixing a signal to be measured with the local signal; a frequency sweep section (14) for sweeping the frequency of the local signal, and a sweep control section (30) for terminating the sweep when the presence section of the signal to be measured has terminated. The signal to be measured is a carrier in a burst and the spectrum of the carrier is to be measured. The width of the presence section of the signal to be measured may be changed. Even if changed, it is possible to control the width of the signal for controlling the frequency sweep, in accordance with the signal to be measured since the sweep is terminated when the presence section of the signal to be measured has terminated.